CDF Operations

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All Experimenters' Meeting

Store Summary (12/13–12/20)

Store	Start Date	Duration (hours)	Initial Instantaneous Luminosity (10^{30} cm^{-2}s^{-1})	Delivered Integrated Luminosity (nb^{-1})	Live Integrated Luminosity (nb^{-1})
3845	12/14	20.7	17.3	779.5	569.4 73.1%
3850	12/15	16.5	51.3	1563.9	1371.2 87.7%
3853	12/17	24.3	54.6	2340.3	1899.2 81.2%
3854	12/18	0.3	61.1	55.3	19.2 34.8%
3862	12/19	0.3	42.2	39.6	26.6 67.3%
Total 3845–3862		62.1		4778.6	3885.6 81.3%
FY2004 (3033–3862)	11/22/03	3524		322,805	254,633 78.9%

Note: First running with silicon during Store 3850
Collected 323 nb^{-1} during 3853 with all systems and default trigger table

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- Efficiency is climbing as we move from startup tests to routine running (70% first week $\Rightarrow$ 81% last week):
  - Still testing new software and trigger tables
    - Testing new readout for COT (still needs work)
    - Next software release (5.3.3 to 6.0.0int3) for TDC firmware, consumer software, trigger tables, L3 software, and offline production software now essentially functional
  - Achieving good efficiency during long stores (e.g. 88% during store 3850) but still expect to improve
- Silicon Status
  - No routine silicon till store ending cleanly. Include after first few hours now if all looks well
  - One run with silicon fully integrated proceeded smoothly for most part
  - SVT confirms beam position as x= -0.35cm, y = 0.24 cm

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- Run 3845, Tuesday, Dec. 14, 9:50
  - Started with default physics table
  - Needed to back up to older data logger due to crosstalk problems in parallel logger code
  - 400Hz motor generator tripped during early part of store
- Run 3850, Wednesday, Dec. 15, 21:40
  - First try at integrating silicon with pre-shutdown physics table
  - Test new software for COT TDC readout
  - Planned attempt to run silicon with default table frustrated by loss of store to quench
- Run 3853, Friday, Dec. 17, 02:10
  - "Harmless" reset left over from COT TDC readout tests causes loss of COT data during routine DAQ HRRs
  - Silicon included during late afternoon, removed for calibration and to study data before proceeding
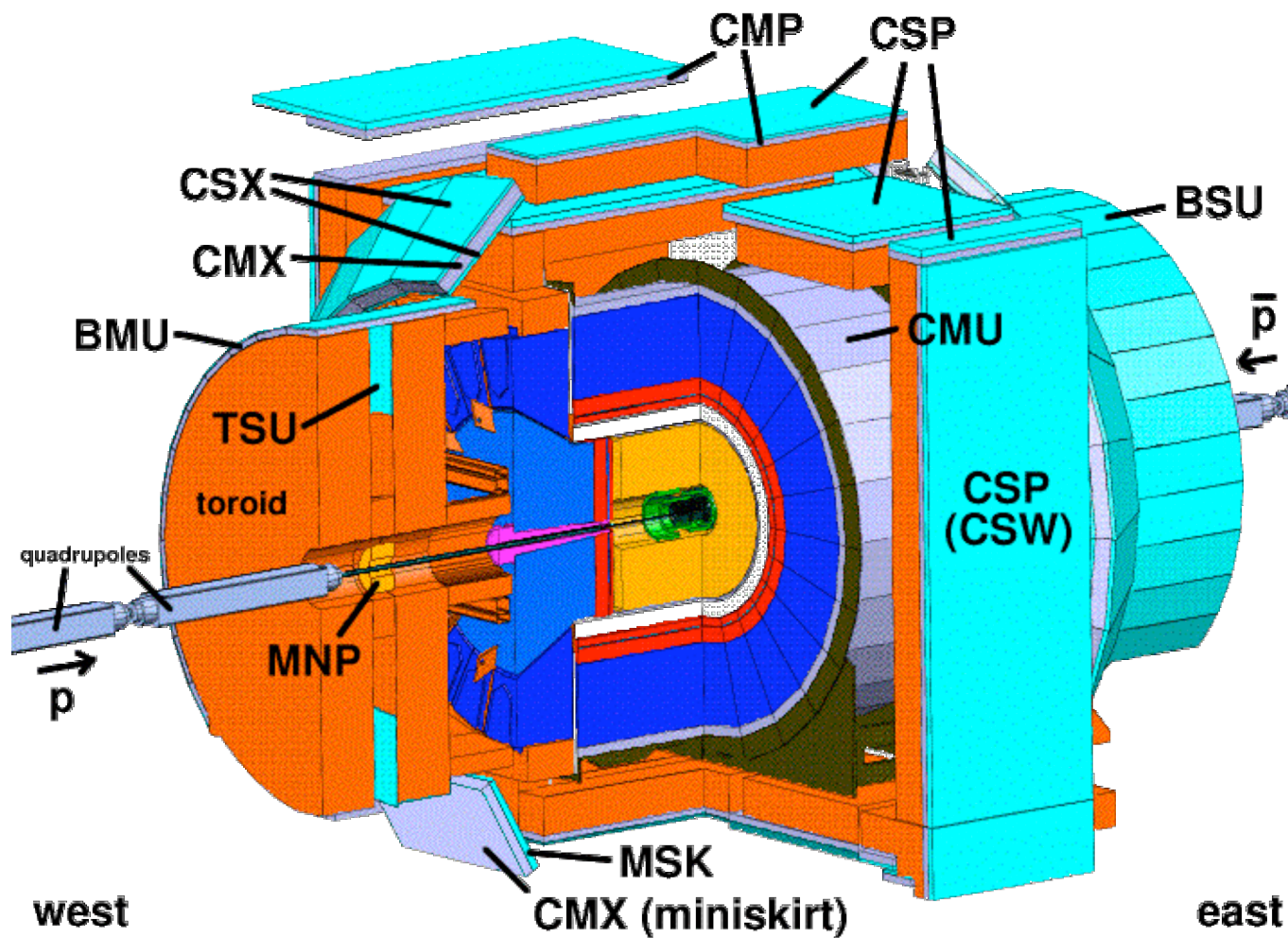
CDF Access Requests

- COT
  - Diagnose problem with noisy data on SL4. Possible shorted microcoax cable on chamber face
    - 1 hour
    - Pull East toroid
  - Look at calibration signals on TDC input.
    - 1 hour
    - Pull North Muon Wall
  - Above 2 can be simultaneous
- EM timing hardware
  - Repair central detector board that does inductive pickup of anode signal
    - 3 hours
    - Pull South Muon Wall
  - No data from several eta slices in plug. Unknown problem
    - 8 hours
    - Pull East toroid

CDF Run IIB Detector

CDF Run IIB Detector (inner)